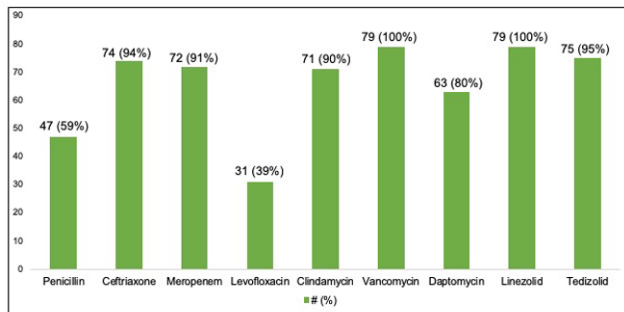


antibiotic susceptibilities for 79 testable isolates. VGS susceptibilities to levofloxacin, penicillin, and ceftriaxone were 39%, 47%, and 94%, respectively.

Conclusion: VGS are common pathogens in FN patients. Prior fluoroquinolone prophylaxis use may be a risk factor. VGS BSI was not associated with increased critical illness compared with non-VGS. Finally, assuming ceftriaxone susceptibility confers that of cefepime, >90% of VGS are susceptible to empiric FN cefepime regimens.

Figure 1: Susceptible VGS Isolates Among 79 Tested



13 of 92 VGS isolates were unavailable for susceptibility testing due to lack of growth on culture media, lost specimens or contamination.

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2687. Extended Infusions of Piperacillin/Tazobactam vs. Cefepime for Empiric Treatment of Neutropenic Fever

Sarah Norman, PharmD¹; Laura Henshaw, PharmD, BCPS, BCOPI¹; David Reeves, PharmD, BCOPI^{1,2}; Sarah Moore, PharmD¹; S. Christian Cheatham, PharmD¹; ¹Franciscan Health Indianapolis, Indianapolis, Indiana; ²Butler University College of Pharmacy and Health Sciences, Indianapolis, Indiana

Session: 275. Transplant ID: Malignancy and Neutropenia
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Background: In neutropenic patients, a fever may be the only indication of a severe underlying infection. According to the National Comprehensive Cancer Network (NCCN) guidelines, for high-risk patients, monotherapy with an anti-pseudomonal β-lactam agent should be initiated. NCCN states emerging data may support extended or continuous infusions of β-lactam therapies; however, preference is not given for cefepime or piperacillin/tazobactam. The objective of this study was to compare the outcomes of extended infusions of piperacillin/tazobactam vs. cefepime for the empiric treatment of neutropenic fever.

Methods: This retrospective, single-center cohort study included patients ≥18 years with an absolute neutrophil count (ANC) less than 500 cells/mm³, single oral temperature measurement ≥38.3°C or ≥38°C sustained over 1 hour period and admitted to a bone marrow transplant unit. Patients received extended infusion piperacillin/tazobactam or cefepime as initial antibiotic therapy for at least 48 hours between January 1, 2015 and September 1, 2018. The primary outcome was time to defervescence in hours. Secondary outcomes included time to defervescence and no acetaminophen use within 8 hours, defervescence by 72 hours, hospital length of stay, clinical failure, in-hospital mortality, and acute kidney injury.

Results: 73 patients were included in this study (36 received piperacillin/tazobactam and 37 received cefepime). The primary outcome of median time to defervescence was 31.8 hours in the piperacillin/tazobactam group and 25 hours in the cefepime group ($P = 0.26$). Secondary outcomes in the piperacillin/tazobactam group compared with cefepime, respectively included median time to defervescence and no acetaminophen use: 43 vs. 35 hours ($P = 0.16$), defervescence by 72 hours: 66.7% vs. 91.9% ($P = 0.01$), median hospital length of stay 28 vs. 22 days ($P = 0.04$), clinical failure 22.2% vs. 24.3% ($P = 0.83$), in-hospital mortality 8.3% vs. 2.8% ($P = 0.36$), rate of acute kidney injury: 50% vs. 24.3% ($P = 0.02$).

Conclusion: These findings suggest there is no difference in time to defervescence between extended infusions of piperacillin/tazobactam compared with extended infusions of cefepime for the empiric treatment of neutropenic fever.

Disclosures. All authors: No reported disclosures.

2688. The Clinical Impact of Early De-escalation of Broad-Spectrum Antibiotics in Acute Myeloid Leukemia Patients with Febrile Neutropenia

Matthew Davis, PharmD; Salma Afifi, PharmD; Dayna McManus, PharmD, BCPS; Jeffrey E. Topal, MD; Yale New Haven Hospital, New Haven, Connecticut

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Background: In patients with febrile neutropenia (FN) the initiation of broad-spectrum antibiotics (BSA), an anti-pseudomonal agent +/- vancomycin, is recommended by national guidelines. BSA should be continued until absolute neutrophil count (ANC) recovery (ANC > 500 cells/mm³). With increasing antimicrobial resistance, clinicians are reassessing the need to continue BSA until count recovery; new data are emerging that patients may be able to have their BSA de-escalated if stable and afebrile. At our institution, some patients are de-escalated from BSA to a fluoroquinolone

before ANC recovery and others are continued on BSA. The purpose of this study was to evaluate the efficacy and safety of early de-escalation compared with the standard of care.

Methods: We retrospectively reviewed acute myeloid leukemia patients receiving induction chemotherapy who developed FN while at Yale New Haven Hospital from March 2013 to August 2018. Patients were excluded if they developed a culture documented infection, received incomplete or multiple induction chemotherapy treatments, or died from underlying disease during hospitalization. The primary outcome was recurrent fever during admission and secondary outcomes included incidence of breakthrough infections (BI), duration of hospital stay, early discharge (discharge before ANC recovery), duration of BSA, and readmission within 7 days of discharge.

Results: A total of 210 patients were evaluated and 91 patients were included (de-escalation, $n = 45$; BSA, $n = 46$). Baseline characteristics are noted in Table 1. There was no statistical difference in rate of recurrent fever in patients who were de-escalated from BSA compared with those that were continued ($P = 0.05$). De-escalated patients had a shorter duration of BSA therapy ($P < 0.05$), earlier discharge ($P = 0.05$) and no difference in readmission rates ($P = 0.39$) (Table 2). There was no difference in rate of BI between both groups and all BI were bacteremias. (Table 3) No patients who experienced a BI died from infection.

Conclusion: The results of this study revealed no difference in the primary outcome of recurrent fever between the BSA and de-escalation groups. De-escalation led to a reduced duration of BSA and facilitated earlier discharge without increasing readmission rates and BI.

Table 1

Baseline Characteristics	De-escalation (n=45)	BSA (n=46)
Age median (range)	59 (18-82)	61 (21-77)
Male n, (%)	23 (49)	24 (52)
History of MDS n, (%)	10 (22)	12 (26)
Induction therapy		
7+3 n, (%)	31 (69)	36 (78)
Vyxeos n, (%)	5 (11)	5 (11)
Other n, (%)	9 (20)	5 (11)

Table 2

Pertinent Outcomes	De-escalation (n=45)	BSA (n=46)	p value
Recurrent fever (n)	12	21	0.05
Early discharge (n)	26	6	<0.05
Breakthrough Infection (n)	5	4	0.7
Median Duration of BSA (days)	13	21	<0.05
Median Duration of hospitalization (days)	34	33	0.93
Readmission (n)	4	2	0.39
Fever (n)	2	0	
Chemotherapy (n)	1	1	
Other (n)	1	1	

Table 3

Breakthrough Organisms	De-escalation (n=5)	BSA (n=4)
<i>P. aeruginosa</i>	2	0
Enterobacteriaceae	1	1
<i>S. viridans</i>	2	0
<i>E. faecium</i> (VRE)	0	3

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2689. Stenotrophomonas maltophilia, The Hidden Threat Among Pediatric Cancer Patients

Youssef Madney, Said, md¹; Riham Abdelaziz, MD²; Shima Samir, md³; Mervat Elanany, MD⁴; ¹Children Cancer Hospital EGYPT, National Cancer Institute, Cairo, Al Wadi al Jadid, Egypt; ²NCI/Children Cancer Hospital, Cairo, Al Jizah, Egypt; ³CCHE Egypt, Cairo, Al Jizah, Egypt; ⁴Cairo University, Cairo, Al Qahirah, Egypt

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Background: Stenotrophomonas maltophilia is an emerging nosocomial pathogen in immunocompromised patients. Although *S. maltophilia* exhibits limited pathogenicity in immunocompetent hosts, it has been shown to cause fatal infections in patients with malignancies. The objective of this study to analyze the clinical characteristics, susceptibility pattern, and treatment outcome of *S. maltophilia* among pediatric cancer patients.

Methods: Retrospective analysis including all pediatric cancer patients treated at children cancer hospital Egypt (CCHE) with *S. maltophilia* bloodstream infection from June 2013 till June 2018.

Results: 281 isolates among 135 pediatric cancer patients. Most are hematological malignancies 67(50%), solid tumors 55 (40%) and post-transplant 13(10%). Most common hematological malignancies were acute lymphoblastic leukemia 34 patients (25%) while brain tumor was the most common solid tumors 20 patients (15%). The spectrum of infections includes bacteremia in 61 patients (45%) catheter-related in 34 (25%), pneumonia in 22 (16%), skin and soft-tissue infection in 11(8%) meningitis in 5 (3%) and disseminated infections with multiorgan involvement in 4(3%) patients. 46 patients (34%) was admitted in intensive care unit (ICU), 67 inpatient (50%), 11 (8%) stem cell transplant unit and 11 patient (8%) from emergency and outpatient department. The isolates revealed 80% susceptibility to Trimethoprim-Sulfamethoxazole (TMP-SMX), 77% to ciprofloxacin, 50% to cefepime and ceftazidime, 63% to amikacin, 48% to piperacillin-tazobactam, 93% to colistin, 97% to tigecycline. Day 30 mortality (Crude mortality rate) 33 patients (25%) while *S. maltophilia* attributable mortality (died within 7 days of culture isolation) was 17 patients (13%). Patients with pneumonia, (TMP-SMX) resistance and ICU admission were associated with a significant risk of mortality.